IN THE CLAIMS

1. (Previously Presented) A communication system, comprising:

a first base transceiver station receiving a first wireless signal from a mobile unit, the first wireless signal comprising:

a first signal portion having a first signal characteristic, and

a second signal portion; and

a second base transceiver station receiving a second wireless signal from the mobile unit, the second wireless signal comprising:

a third signal portion having a second signal characteristic, and

a fourth signal portion, wherein a fifth signal portion is generated by applying a processing operation to the first and third signal portions, independently from the second and fourth signal portions, the processing operation operable to perform either of the steps of:

selecting one of the first and third signal portions using the first and second signal characteristics, and

combining the first and third signal portions, wherein combining includes adding or averaging the first and third signal portions.

2. (Original) A system according to claim 1, the first signal characteristic comprising a first signal-quality value associated with the first signal portion, the second signal characteristic comprising a second signal-quality value associated with the third signal portion, and the step of using the first and second signal characteristics comprising:

performing a comparison of the first and second signal-quality values, thereby generating a comparison result;

selecting the first signal portion if the comparison result indicates that the first signal portion is preferable to the second signal portion; and

selecting the third signal portion if the comparison result indicates that the third signal portion is preferable to the first signal portion.

3. (Original) A system according to claim 2, the first signal-quality value comprising at least one of a first signal-to-noise ratio, a first signal-to-interference ratio, a first signal size, a first error-detection result, and a first error-correction result, and the second signal-quality value comprising at least one of a second signal-to-noise ratio, a second signal-to-interference ratio, a second signal size, a second error-detection result, and a second error-correction result.

4. (Original) A system according to claim 2, the first signal portion comprising:

a first sub-portion having a first sub-portion quality value; and

a second sub-portion having a second sub-portion quality value, the third signal portion comprising:

a third sub-portion having a third sub-portion quality value; and

a fourth sub-portion having a fourth sub-portion quality value, the first signal-quality value comprising a mean of the first and second sub-portion quality values, and the second signal-quality value comprising a mean of the third and fourth sub-portion quality values.

5. (Previously Presented) A system according to claim 1, the processing operation further comprising:

determining a third signal characteristic of the second signal portion;

determining a fourth signal characteristic of the fourth signal portion;

generating a sixth signal portion from the second and fourth signal portions, the sixth signal portion being generated according to either of the steps of:

selecting one of the second and fourth signal portions using the third and fourth signal portions, and

combining the second and fourth signal portions; and

sequentially concatenating the fifth and sixth signal portions to form a seventh signal portion.

6. (Original) A system according to claim 1, the first signal characteristic comprising a first signal size associated with the first signal portion, the second-signal characteristic comprising a second signal size associated with the third signal portion, and the step of using the first and second signal characteristics comprising combining the first and second signal sizes, thereby generating a third signal size associated with the fifth signal portion.

7. (Original) A system according to claim 6, wherein the step of combining the first and second signal sizes comprises adding the first and second signal sizes.

8. (Original) A system according to claim 6, wherein the step of combining the first and second signal sizes comprises determining a mean of the first and second signal sizes.

9. (Previously Presented) A method of communication, comprising:

receiving, by a first base transceiver station, a first wireless signal from a mobile unit, the first wireless signal comprising:

a first signal portion having a first signal characteristic, and

a second signal portion;

receiving, by a second base transceiver station, a second wireless signal from the mobile unit, the second wireless signal comprising:

a third signal portion having a second signal characteristic, and

a fourth signal portion; and

generating a fifth signal portion by applying a processing operation to the first and third signal portions, independently from the second and fourth signal portions, the processing operation operable to perform either of the steps of:

selecting one of the first and third signal portions using the first and second signal characteristics, and

combining the first and third signal portions, wherein combining includes adding or averaging the first and third signal portions.

10. (Original) A method according to claim 9, the first signal characteristic comprising a first signal-quality value associated with the first signal portion, the second signal characteristic comprising a second signal-quality value associated with the third signal portion, and the step of using the first and second signal characteristics comprising:

performing a comparison of the first and second signal-quality values, thereby generating a comparison result;

selecting the first signal portion if the comparison result indicates that the first signal portion is preferable to the second signal portion; and

selecting the third signal portion if the comparison result indicates that the third signal portion is preferable to the first signal portion.

11. (Original) A method according to claim 10, the first signal-quality value comprising at least one of a first signal-to-noise ratio, a first signal-to-interference ratio, a first signal size, a first error-detection result, and a first error-correction result, and the second signal-quality value comprising at least one of a second signal-to-noise ratio, a second signal-to-interference ratio, a second signal size, a second error-detection result, and a second error-correction result.

12. (Original) A method according to claim 10, the first signal portion comprising:

a first sub-portion having a first sub-portion quality value; and

a second sub-portion having a second sub-portion quality value, the third signal portion comprising:

a third sub-portion having a third sub-portion quality value; and

a fourth sub-portion having a fourth sub-portion quality value, the first signal-quality value comprising a mean of the first and second sub-portion quality values, and the second signal-quality value comprising a mean of the third and fourth sub-portion quality values.

13. (Previously Presented) A method according to claim 9, the processing operation further comprising:

determining a third signal characteristic of the second signal portion;

determining a fourth signal characteristic of the fourth signal portion;

generating a sixth signal portion from the second and fourth signal portions, the sixth signal portion being generated according to either of the steps of:

selecting one of the second and fourth signal portions using the third and fourth signal characteristics, and

combining the second and fourth signal portions; and

sequentially concatenating the fifth and sixth signal portions to form a seventh signal portion.

14. (Original) A method according to claim 9, the first signal characteristic comprising a first signal size associated with the first signal portion, the second-signal characteristic comprising a second signal size associated with the third signal portion, and the step of using the first and second signal characteristics comprising combining the first and second signal sizes, thereby generating a third signal size associated with the fifth signal portion.

15. (Original) A method according to claim 14, wherein the step of combining the first and second signal sizes comprises adding the first and second signal sizes.

16. (Original) A method according to claim 14, wherein the step of combining the first and second signal sizes comprises determining a mean of the first and second signal sizes.

17. (Previously Presented) A communication system, comprising:

means for receiving a first wireless signal from a mobile unit, the first wireless signal comprising:

a first signal portion having a first signal characteristic, and

a second signal portion; and

means for receiving a second wireless signal from the mobile unit, the second wireless signal comprising:

a third signal portion having a second signal characteristic, and

a fourth signal portion; and

means for generating a fifth signal portion, the means for generating the fifth signal portion comprising means for processing the first and third signal portions, independently from the second and fourth signal portions, the means for processing operable to perform either of the steps of:

selecting one of the first and third signal portions using the first and second signal characteristics, and

combining the first and third signal portions, wherein combining includes adding or averaging the first and third signal portions.

18. (Original) A system according to claim 17, the first signal characteristic comprising a first signal-quality value associated with the first signal portion, the second signal characteristic comprising a second signal-quality value associated with the third signal portion, and the means for using the first and second signal characteristics comprising:

means for performing a comparison of the first and second signal-quality values, thereby generating a comparison result;

means for selecting the first signal portion if the comparison result indicates that the first signal portion is preferable to the second signal portion; and

means for selecting the third signal portion if the comparison result indicates that the third signal portion is preferable to the first signal portion.

19. (Original) A system according to claim 18, the first signal-quality value comprising at least one of a first signal-to-noise ratio, a first signal-to-interference ratio, a first signal size, a first error-detection result, and a first error-correction result, and the second signal-quality value comprising at least one of a second signal-to-noise ratio, a second signal-to-interference ratio, a second signal size, a second error-detection result, and a second error-correction result.

20. (Original) A system according to claim 18, the first signal portion comprising:

a first sub-portion having a first sub-portion quality value; and

a second sub-portion having a second sub-portion quality value, the third signal portion comprising:

a third sub-portion having a third sub-portion quality value; and

a fourth sub-portion having a fourth sub-portion quality value, the first signal-quality value comprising a mean of the first and second sub-portion quality values, and the second signal-quality value comprising a mean of the third and fourth sub-portion quality values.

21. (Previously Presented) The system according to claim 17, the means for processing further comprising:

means for determining a third signal characteristic of the second signal portion;

means for determining a fourth signal characteristic of the fourth signal portion;

means for generating a sixth signal portion from the second and fourth signal portions, the means for generating the sixth signal portion including either of:

means for selecting one of the second and fourth signal portions using the third and fourth signal characteristics, and

means for combining the second and fourth signal portions; and

means for sequentially concatenating the fifth and sixth signal portions to form a seventh signal portion.

22. (Original) A system according to claim 17, the first signal characteristic comprising a first signal size associated with the first signal portion, the second-signal characteristic comprising a second signal size associated with the third signal portion, and the means for using the first and second signal characteristics comprising means for combining the first and second signal sizes, thereby generating a third signal size associated with the fifth signal portion.

23. (Original) A system according to claim 22, wherein the means for combining the first and second signal sizes comprises means for adding the first and second signal sizes.

24. (Original) A system according to claim 22, wherein the means for combining the first and second signal sizes comprises means for determining a mean of the first and second signal sizes.

25. (Previously Presented) A computer-readable medium having a set of instructions operable to direct a processor to perform the steps of:

receiving, by a first base transceiver station, a first wireless signal from a mobile unit, the first wireless signal comprising:

a first signal portion having a first signal characteristic, and

a second signal portion;

receiving, by a second base transceiver station, a second wireless signal from the mobile unit, the second wireless signal comprising:

a third signal portion having a second signal characteristic, and

a fourth signal portion; and

generating a fifth signal portion by applying a processing operation to the first and third signal portions, independently from the second and fourth signal portions, the processing operation operable to perform either of the steps of:

selecting one of the first and third signal portions using the first and second signal characteristics, and

combining the first and third signal portions, wherein combining includes adding or averaging the first and third signal portions.

26. (Original) A computer-readable medium according to claim 25, the first signal characteristic comprising a first signal-quality value associated with the first signal portion, the second signal characteristic comprising a second signal-quality value associated with the third signal portion, and the step of using the first and second signal characteristics comprising:

performing a comparison of the first and second signal-quality values, thereby generating a comparison result;

selecting the first signal portion if the comparison result indicates that the first signal portion is preferable to the second signal portion; and

selecting the third signal portion if the comparison result indicates that the third signal portion is preferable to the first signal portion.

27. (Original) A computer-readable medium according to claim 26, the first signal-quality value comprising at least one of a first signal-to-noise ratio, a first signal-to-interference ratio, a first signal size, a first error-detection result, and a first error-correction result, and the second signal-quality value comprising at least one of a second signal-to-noise ratio, a second signal-to-interference ratio, a second signal size, a second error-detection result, and a second error-correction result.

28. (Original) A computer-readable medium according to claim 26, the first signal portion comprising:

a first sub-portion having a first sub-portion quality value; and

a second sub-portion having a second sub-portion quality value, the third signal portion comprising:

a third sub-portion having a third sub-portion quality value; and

a fourth sub-portion having a fourth sub-portion quality value, the first signal-quality value comprising a mean of the first and second sub-portion quality values, and the second signal-quality value comprising a mean of the third and fourth sub-portion quality values.

29. (Previously Presented) A computer-readable medium according to claim 25, the processing operation further comprising:

determining a third signal characteristic of the second signal portion;

determining a fourth signal characteristic of the fourth signal portion;

generating a sixth signal portion from the second and fourth signal portions, the sixth signal portion being generated according to either of the steps of:

selecting one of the second and fourth signal portions using the third and fourth signal characteristics, and

combining the second and fourth signal portions; and

sequentially concatenating the fifth and sixth signal portions to form a seventh signal portion.

30. (Original) A computer-readable medium according to claim 25, the first signal characteristic comprising a first signal size associated with the first signal portion, the second-signal characteristic comprising a second signal size associated with the third signal portion, and the step of using the first and second signal characteristics comprising combining the first and second signal sizes, thereby generating a third signal size associated with the fifth signal portion.

31. (Original) A computer-readable medium according to claim 30, wherein the step of combining the first and second signal sizes comprises adding the first and second signal sizes.

32. (Original) A computer-readable medium according to claim 30, wherein the step of combining the first and second signal sizes comprises determining a mean of the first and second signal sizes.

33. (Previously Presented) A communication system, comprising:

a first network;

a gateway connecting the first network to a second network;

a mobile unit;

a base station controller in communication with the first network;

a first base transceiver station receiving a first wireless signal from the mobile unit, the first wireless signal comprising:

a first signal portion having a first signal characteristic, and

a second signal portion; and

a second base transceiver station receiving a second wireless signal from the mobile unit, the second wireless signal comprising:

a third signal portion having a second signal characteristic, and

a fourth signal portion, wherein a fifth signal portion is generated by applying a processing operation to the first and third signal portions, independently from the second and fourth signal portions, the processing operation operable to perform either of the steps of:

selecting one of the first and third signal portions, and

combining the first and third signal portions, wherein combining includes adding or averaging the first and third signal portions.

34. (Original) A system according to claim 33, the first signal characteristic comprising a first signal-quality value associated with the first signal portion, the second signal characteristic comprising a second signal-quality value associated with the third signal portion, and the step of using the first and second signal characteristics comprising:

performing a comparison of the first and second signal-quality values, thereby generating a comparison result;

selecting the first signal portion if the comparison result indicates that the first signal portion is preferable to the second signal portion; and

selecting the third signal portion if the comparison result indicates that the third signal portion is preferable to the first signal portion.

35. (Original) A system according to claim 34, the first signal-quality value comprising at least one of a first signal-to-noise ratio, a first signal-to-interference ratio, a first signal size, a first error-detection result, and a first error-correction result, and the second signal-quality value comprising at least one of a second signal-to-noise ratio, a second signal-to-interference ratio, a second signal size, a second error-detection result, and a second error-correction result.

36. (Original) A system according to claim 34, the first signal portion comprising:

a first sub-portion having a first sub-portion quality value; and

a second sub-portion having a second sub-portion quality value, the third signal portion comprising:

a third sub-portion having a third sub-portion quality value; and

a fourth sub-portion having a fourth sub-portion quality value, the first signal-quality value comprising a mean of the first and second sub-portion quality values, and the second signal-quality value comprising a mean of the third and fourth sub-portion quality values.

37. (Previously Presented) A system according to claim 33, the processing operation further comprising:

determining a third signal characteristic of the second signal portion;

determining a fourth signal characteristic of the fourth signal portion;

generating a sixth signal portion from the second and fourth signal portions, the sixth signal portion being generated according to either of the steps of:

selecting one of the second and fourth signal portions using the third and fourth signal characteristics, and

combining the second and fourth signal portions; and

sequentially concatenating the fifth and sixth signal portions to form a seventh signal portion.

38. (Original) A system according to claim 33, the first signal characteristic comprising a first signal size associated with the first signal portion, the second-signal characteristic comprising a second signal size associated with the third signal portion, and the step of using the first and second signal characteristics comprising combining the first and second signal sizes, thereby generating a third signal size associated with the fifth signal portion.

39. (Original) A system according to claim 38, wherein the step of combining the first and second signal sizes comprises adding the first and second signal sizes.

40. (Original) A system according to claim 38, wherein the step of combining the first and second signal sizes comprises determining a mean of the first and second signal sizes.